Appendix C: Example Investigation Report from the Informatics Patient Safety Database

Introduction

The following case is a representative sample from the VA Informatics Patient Safety (IPS) database of reported and investigated cases of electronic healthcare record-related patient safety concerns. A risk score is given to each reported incident. These definitions are unique to the IPS office. They are used to assess safety and level of risk to VA and the type of action recommended by IPS. This example is part of a larger evaluation of cases, in which a high-level classification was given to each case. These classifications are listed in the chart below to help indicate to the reader the general topic of the cases or applications involved.

Classifications

Med	Medication related events
OERR	Physician Order Entry events (OERR = Order Entry Result Reporting software name)
HIE	Health Information Exchange events
CDS	Clinical Decision Support events
Other	Vendor and other related software events

Case 52

Subject: Remote Data Interoperability (RDI) is unavailable. Several VA Medical Centers reported RDI is not connecting. VistA Outpatient Pharmacy users are seeing the following message when processing orders: "Remote data not available. Only local order checks are processed"		
Case ID: 52 **Code**: HIE, Med	**Application(s) involved:** Outpatient Pharmacy Health Data Repository CPRS	**Risk Score total: 24** Severity = 4, Frequency = 2, Detectability = 3

Overview:

A Veterans Administration Medical Center (VAMC) reported that Remote Data Interoperability was unavailable. This resulted in a dialog whereby numerous VA Medical Centers were experiencing the same issue. Veteran's Health Information Systems and Technology Architecture (VistA) and Computerized Patient Record System (CPRS) users were receiving the following message: "Remote data not available. Only local order checks are processed." This indicated that connectivity to the Health Data Repository (HDR-2) had been lost, so remote order checks were not done. The issue reported resulted in a patient receiving a prescription for Lortab (acetaminophen/hydrocodone) when the patient was allergic to hydrocodone. The allergy to hydrocodone was documented on the patient's CPRS chart at another VA medical center, but not at the VA medical center prescribing the Lortab. The patient noticed the product name and recognized that they had a previous adverse reaction and returned to the facility to obtain a replacement prescription for an alternate analgesic. At the time of the order, remote order checking was not available for the prescriber or the pharmacist. While the pharmacist was processing the prescription he/she may not see an alert from Remote Data Interoperability (RDI) during the finishing of the prescription. In this case, during the pharmacist verification step, the RDI order check did not display and pharmacist saw the message: "Remote Order Checking not available – checks done on local data only". As described here the patient was prescribed and received a prescription for Lortab when they did have an allergy to the medication. In this case the prescription was discontinued until the informatics pharmacist was able to locate the remote allergy information. This resulted in a two hour delay in processing the prescription.

Another report presented as: VAMC B had a patient with a documented adverse reaction to lisinopril in their system. The reaction the patient experiences when ingesting lisinopril is angioedema (localized

swelling involving the deep dermis or subcutaneous tissue). The patient presented to the Emergency Department of VAMC facility A with high blood pressure. He was prescribed lisinopril, and no RDI order check was available. The patient redeveloped serious angioedema. The order showed "Remote Order Checking not available – checks done on local data only". There have been numerous complaints from medical centers nationwide relative to RDI. The complaints delineate extremely slow or complete loss of connectivity**.**

Potential patient harm
Patient could be harmed by taking a prescribed medication to which they have allergy/contraindication, or overdose, potentially leading to serious or fatal consequences for the patient. Secondary, this can also potentially lead to delay or interruption in medication therapy due to the order checks not processing leading to the pharmacist being unable to finish the prescription.